



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/476,219	12/30/1999	Robert J. Fite	884.182US1	7477
21186	7590 04/20/2004		EXAMINER	
SCHWEGN P.O. BOX 2	MAN, LUNDBERG, W	HAN, YOUNGHUIE JESSICA		
	MINNEAPOLIS, MN 55402			PAPER NUMBER
			2838	

DATE MAILED: 04/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

				St X		
· · · · · ·		Application No.	Applicant(s)			
		09/476,219	FITE, ROBERT J.			
Office Action Summary		Examiner	Art Unit			
		Y. J. Han	2838			
Period fo	The MAILING DATE of this communication ap	ppears on the cover shee	t with the correspondence ad	dress		
A SH THE I - Exter after - If the - If NO - Failu Any	ORTENED STATUTORY PERIOD FOR REPI MAILING DATE OF THIS COMMUNICATION nsions of time may be available under the provisions of 37 CFR 1 SIX (6) MONTHS from the mailing date of this communication. period for reply specified above is less than thirty (30) days, a reduced period for reply is specified above, the maximum statutory period reto reply within the set or extended period for reply will, by statutely received by the Office later than three months after the mailined patent term adjustment. See 37 CFR 1.704(b).	136(a). In no event, however, mappy within the statutory minimum of d will apply and will expire SIX (6) te, cause the application to becon	ay a reply be timely filed If thirty (30) days will be considered timely MONTHS from the mailing date of this co the ABANDONED (35 U.S.C. § 133).	<i>y.</i> ommunication.		
Status						
1)⊠	Responsive to communication(s) filed on 17.	June 2002.				
	This action is FINAL . 2b) This action is non-final.					
3)□	3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
Disposit	ion of Claims	•				
4)⊠ 5)□ 6)⊠ 7)□ 8)□	Claim(s) 1-16 is/are pending in the application 4a) Of the above claim(s) is/are withdred claim(s) is/are allowed. Claim(s) 1-16 is/are rejected. Claim(s) is/are objected to. Claim(s) are subject to restriction and	awn from consideration				
	ion Papers					
10)⊠	The specification is objected to by the Examination The drawing(s) filed on <u>17 June 2002</u> is/are: Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct The oath or declaration is objected to by the	a) \square accepted or b) \square be drawing(s) be held in absection is required if the drawing \square	eyance. See 37 CFR 1.85(a). wing(s) is objected to. See 37 Cl			
Priority	under 35 U.S.C. § 119	•				
a)	Acknowledgment is made of a claim for foreign All b) Some * c) None of: 1. Certified copies of the priority docume 2. Certified copies of the priority docume 3. Copies of the certified copies of the priority docume application from the International Bures See the attached detailed Office action for a life	nts have been received nts have been received iority documents have beau (PCT Rule 17.2(a)).	in Application No een received in this National	Stage		
2)	nt(s) ce of References Cited (PTO-892) ce of Draftsperson's Patent Drawing Review (PTO-948) rmation Disclosure Statement(s) (PTO-1449 or PTO/SB/0 er No(s)/Mail Date	Pape (18) 5) Notice	view Summary (PTO-413) r No(s)/Mail Date te of Informal Patent Application (PT	O-152)		

Art Unit: 2838

DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, "a module operable to sense a current," "a module operable to adjust the voltage," "via hardware," "via software," "a processor," "a current sensing resistor connected in series with an output of the DC-DC converter" recited in claims must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Response to Amendment

2. The amendment filed 1/24/02 is objected to under 35 U.S.C. 132 because it introduces new matter into the disclosure. 35 U.S.C. 132 states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: Figure 6 and its corresponding amendment to the specification. Should applicant believe that the claimed invention is sufficiently described in the original disclosure, applicant is required to point out explicit language in the specification, citing page and line numbers, where such support exists. Applicant should note that the newly proposed amendment is supported "more generally by the remainder of the specification" is insufficient.

Applicant is required to cancel the new matter in the reply to this Office Action.

Art Unit: 2838

Response to Argument

3. In response to the 112 rejection, applicant contends that "these claims are in fact method claims they need not incorporate any specific apparatus, and the claimed results are obtainable simply by operation of the functional elements of the method themselves." First, applicant fails to recognize that claims 9-16 are not method claims. Independent claim 9 recites "A DC-DC converter, comprising." Moreover, applicant merely alleges that "the limitations of the claims themselves sufficiently describe various methods comprised of elements that may be easily understood by one skilled in the art, and believes that the elements of the claims alone sufficiently describe the invention to one skilled in the art."

The newly proposed Figure 6 and the newly proposed amendment to the specification, objected to as being new matter, do not provide any new insight as to how to make and how to use the claimed invention. The proposed block diagrams with functional labels are nonenabling. The original specification as filed does not provide as to whether the parts represented by boxes must be specifically constructed or modified for applicant's system. Also there are no details in the original specification of how the parts should be interconnected, timed and controlled so as to obtain the specific operations desired by the applicant. As for newly proposed Figures 7 and 8 which merely rephrase claims 1 and 8 in flow charts do not in any way describe how to make and how to use the invention.

Art Unit: 2838

Specification

4. The amendment filed 6/17/02 is objected to under 35 U.S.C. 132 because it introduces new matter into the disclosure. 35 U.S.C. 132 states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: The newly proposed Figure 6 and the newly proposed amendment to the specification as described in the "Response to Argument."

Applicant is required to cancel the new matter in the reply to this Office Action.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claims 1-16 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention..

The specification does not describe how the DC-DC converter is configured to obtain the claimed invention. There is nothing in the specification that shows how the DC-DC converter senses an output current, converts the sensed output current, adjusts the voltage signal, and adds the adjusted voltage signal as claimed. There is no mention as to how the claimed "hardware, "software," "processor," "a current sensing resistor connected in series" should be

Art Unit: 2838

interconnected, timed and controlled so as to obtain the specific operations desired by the applicant. The figures merely illustrate the relationship between the voltage and current. Hence, the original disclosure do not provide support to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Should applicant believe that the claimed invention is sufficiently described in the specification, applicant is required to point out explicit language in the specification, citing page and line numbers, where such support exists.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 8. Claims 1-16 are rejected under 35 U.S.C. 102(e) as being anticipated by Hua et al (5,999,433) or Buono (5,949,222).

Both Hua et al and Buono references disclose a DC to DC converter sensing a current drawn from the DC to DC converter and adjusting the voltage in relationship to load current level as cited in the claims.

Claims 1-16 are rejected under 35 U.S.C. 102(e) as being anticipated by Yang et al (6,130,526).

Art Unit: 2838

Yang et al reference disclose a DC to DC converter sensing a current drawn from the DC to DC converter and adjusting the voltage in relationship to load current level as cited in the claims.

Conclusion

9. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Y. J. Han whose telephone number is 571-272-2078. The examiner can normally be reached on Mon-Fri 5:30am-2:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Sherry can be reached on 571-272-2084. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2838

Page 7

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

J. Han

Primary Examiner Art Unit 2838